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ABSTRACT

This paper reports on some of the theories and methods that could characterize historical study in the field of educational technology. After a discussion of the importance of historical study, it provides background about the problems facing the uses of different historical methods in the study of educational technology. Difficulties arise when large numbers of members of the field believe that only certain factual content is the limit of the study of educational technology. This paper proposes the use of two specific methodologies in the study of the history of educational technology--the history of culture and the history of ideas. (Contains 61 references.) (AEF)

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**Title:**

# History in Educational Technology

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> Whether we like it or not we can never sever our links with the past complete with all its errors. It survives in accepted concepts, in the presentation of problems in everyday life, as well as the language and institutions that we employ. Concepts are not spontaneously created or generated but are determined by prior thought - (Ludwik Fleck, 1979, p. 9).

This paper reports on some of the theories and methods that could charaterize historical study in the field of educational technology. It will begin with a discussion of the importance of historical study. Then it willl provide background about the problems facing the uses of differing historical methods in the study of educational technology. A description of the major domains of historical study will follow. This description will include a deeper discussion of the domains of intellectual history, including arguments for the use of two specific methodologies in the study of the history of educational technology, the history of culture and the history of ideas.

**Introduction**

History can be viewed as an interaction. It can be the interaction between the empirical and the hermenuetical (the intent to understand), the interaction between science and art, the interaction between anaysis and expresion, or even the interaction between events and thoughts.

Many professionals seem to be interested in the history of the field in which they practice. Some are interested inknowing their intellectual heritage, others would merely like to have a sense of their professional roots.

History is often viewed as a sort of a body of information. In this view history is considered to be a compilation of data. It appeals to the need for factual content. This view is empirical.

But history can also viewed from its methodological and theoretical starting points. In this view history is guided by the methods and theories that are followed when historical studies are undertaken. This view can be thought of as affective because the attitudes and values of the investigator are believed to effect a study. This view is philosophical.

These two views of history do not, in fact could not, stand in isolation from each other. There is factual content in the philosophical view of history. And there are philosophical considerations in the empirical view of history, although most often these are assumed and therefore the resultant reports or studies are considered to be factual. It is the primary emphasis of each of these viewpoints that contributes to their different outlooks on history.

In a field such as educational technology where each person formulates her or his of view of what the field is, each person could have a correspondingly different view of what the field's history is. The existance of a plurality of histories is not itself problematic. The problem arises when large numbers of members of the field believe that only certain factual content is the limit of the study of the history of the field. A discussion of the theories and methods of historical study can identify the alternatives that individuals can adopt or adopt for their own specific needs.

Studying the history of educational technology should help to answer the questions like 'why do educational technologists think the way they do about educational technology?' and 'how has that way of thinking changed with time?'. Perhaps these questions appear to invite mere speculation but as historian George Boas stated, "the history of ideas tells us among other things how we got to think the way we do-and if that is not of importance one wonders what is" (Boas, 1969, p. 3).

**Why study history?**

History is strongly connected with the concept of change in two ways. First, the study of history helps to show how things have changed and helps to explain why they are the way they are at present. Second, history provides the understanding which is an essential component of reflective thought. The study of history can help maintain traditions, help individuals to stick to their roots, if the roots are valued strongly enough. But historical analysis may also provide

more options. An historical understanding can help us to 'break out' of past patterns or shift emphases if it seems important to do so. History can greatly contribute to the conscious decisions that are made about change.

Robert Duffy (1988) argues that "history is critical in forging a civilized intellect" (p. 460). Duffy suggests that there are five "desirable experiences and habits of mind uniquely promoted" (p.460) when studying history; (1) perspective, (2) encounters in cultural literacy, (3) appreciation of relativism in a pluralistic world, (4) analytical and (5) skeptical habits of mind.

Duffy describes perspective as "the ability to see people, values, ideas, institutions, or events against a larger convas of antecedents, related situations and relevant principles" (p.460). He argues that encounters in cultural literacy occur when the student's values and ideas confront "great ideas, compelling personalities, events, and value systems of the past (p.461). An awarenes of relativism arises when "students are emersed in other cultures at other times" (p.461). Analytical habits are improves when "contending theses are permitted to sift and arrange facts into differing explanations of the event, idea, or personality at issue" (p. 461). Skeptical habits involve students in the "need for data and information before comitting to a proposition" as well as "a quality of mind that can live with tentativeness where the data are suggestive but insufficient" (p.462).

Harry Helson (1972) argued that there were seven reasons for psychologists to study the history of psychology. Since much of the field of educational technology is so closely associated with psychology I felt that it might be instructive to include these here. These seven reasons included: (1) "the driving power of ideas" (p. 116), that ideas stir emotions and lead to action; (2) "that the scientific enterprise is more or less continuous" (p.116), that science builds on what came before (even if it were wrong or had to be changed); (3) "perspective in the field leads one to discount large claims" (p.116), that attempts have always been made to claim the singular importance of one particular method, approach, or device; (4) "outright mistakes may be avoided if one sees how they were made in the past" (p.116), that while history may not be cyclical, patterns do emerge and occasionally circumstances sometimes provide the opportunity to avoid repeting errors; (5) to locate examples for teaching and scholarship; (6) "the mere joy of reading historical accounts" (p.117), which emphasizes the aesthetic dimension of both reading scholarly works and the satisfaction included in the struggle of academic expression; and (7) "that success as a rule is not achieved immediately" (p.117) in scholarly thought.

**The historiographical problem of educational technology**

Continuing in our review of history in psychology, John Wettersten (1975) identified some fundemental historiography/ methodological/ theoretical considerations for relating the history of scientific psychology The considerations identified by Wettersten are also important to studies in the history of educational technology. This is particularly true when you consider how many educational technologists affiliate themselves with psychology. Wettersten identified two types of histories : (1) inductivist, which includes true theories, facts, the discoverers, and dates of discovery; and (2) conventionalist, which says that the theories that were modified to get to present theories should be included. Wettersten puts the fundemental problem of writing a history of scientific psychology this way:

"Though historians of psychology have attempted to meet both the inductivist and conventionalist standards, a successful history of psychology cannot be written in this way. There is one crucial fact which forces historians of psychology (of either bent) into difficulties: that the history of psychology is, for the most part, a history of schools. The research produced by the schools does not fit inductivist or conventionalist standards because the theories of different schools contradict each other. Contradictory theories cannot be both true, or both be modified antecedents of any unified contemporary theory" (p.157).

To some extent, attempts to write a history of educational technology face this same dilemna. Although it is certainly true that the nuances of practice more readily allow for the merging of differing theory bases. But there are probably more interpretations of the basic theories in an applied field which further complicates the problem.

Wettersten identified five techniques which were used by historians of scientific psychology to mask their fundemental problem. These techniques "are used to avoid the discussions of controversies, mistakes ans problems, and this avoidance leads to a misleading picture of the history of scientific psychology" (pp.157-158). The five techniques

are: (1) vague and uncritical praise of theories; (2) recognition of fact gathering regardless of the significance of the facts, (3) uncritical praise of methodological theory: (4) recognition of techniques regardless of the results they produce; and (5) discussion of careers.

"How can the history of psychology be portrayed as a steady development culminating in current theory when any portrayal of current theory is either incomplete or inconsistant?" (p.158). (because it does not account for criticism/failure). "There are two solutions to the problems of the incompatibility of contemporary theories: one may write the history of a single school, or one may seek to reconcile different schools and their histories" (p.159). (in either casecriticism and failure must be addressed).

"Historians of scientific psychology have intended to portray the steady growth of the application of the scientific method and the results of that application. This may be interpreted in two ways. On the one hand, one may protray (sp) the intellectual history of the solution to problems of explaining human behavior. On the other hand, one may relate the story of the growth of the influence and study of scientific psychology as a sociological phenomenon" (pp.170-171). This is analogous to the history of ideas and cultural history.

"The history of psychology consists for the most part of the development, conflict and decline of schools...(if critical history is avoided)...the actual problems, theories aims and mistakes of psychologists- the most important events to understand if one wants to understand the history of any intellectual tradition-are omitted or distorted" (p.171).

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